

What is claimed is:

1. A portable radiation imaging system comprising:

a radiation source; and

a two dimensional radiation image detection device that  
5 records a radiation image by detecting the radiation emitted  
from said radiation source and is transmitted through a subject;  
wherein both said elements are structured to be carriable,  
further comprising:

an angular signal output means that outputs an angular  
10 signal which represents the degree of tilt of the radiation  
emitted from said radiation source in relation to the detection  
surface of said radiation image detection device; and

a tilt adjustment means that adjusts said tilt of the  
radiation in relation to the detection surface of the radiation  
15 image detection device to become substantially perpendicular  
by changing the tilt angle of said radiation source based on  
said angular signal output from said angular signal output means.

2. A portable radiation imaging system comprising:

a radiation source; and

a two dimensional radiation image detection device that  
20 records a radiation image by detecting the radiation emitted  
from said radiation source and is transmitted through a subject;  
wherein both said elements are structured to be carriable,  
further comprising:

an angular signal output means that outputs an angular  
25 signal which represents the degree of tilt of the radiation

emitted from said radiation source in relation to the detection surface of said radiation image detection device; and

a tilt adjustment means that adjusts said tilt of the radiation in relation to the detection surface of the radiation image detection device to become substantially perpendicular by changing the tilt angle of said radiation image detection device based on said angular signal output from said angular signal output means.

3. A portable radiation imaging system comprising:

a radiation source; and

a two dimensional radiation image detection device that records a radiation image by detecting the radiation emitted from said radiation source and is transmitted through a subject; wherein both said elements are structured to be carriable, further comprising:

a command means that generates an exposure command to said radiation source when the tilt of the radiation to be emitted from said radiation source in relation to the detection surface of said radiation image detection device is substantially perpendicular.

4. A radiation imaging system according to any one of claim 1, 2, or 3, further comprising a portable shift means that enables horizontal movement of the radiation source.

5. A radiation imaging system according to any one of claim 1, 2, or 3, further comprising a portable shift means that enables horizontal movement of the radiation image

detection device.

6. A two dimensional radiation image detection device capable of recording a radiation image equipped with an angular signal output means that outputs an angular signal which represents the degree of tilt of the radiation emitted from a radiation source in relation to the detection surface of said radiation image detection device.

7. A two dimensional radiation image detection device capable of recording a radiation image equipped with a command means that generates an exposure command to the radiation source when the tilt of the radiation to be emitted by a radiation source in relation to the detection surface of said radiation image detection device is substantially perpendicular.